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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/665,760	09/20/2000	Ulrich Priesnitz	GR 98 P 1397 P	8661
21495	7590	05/05/2004	EXAMINER	
CORNING CABLE SYSTEMS LLC P O BOX 489 HICKORY, NC 28603			DYE, RENA	
			ART UNIT	PAPER NUMBER
			3627	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/665,760

**Applicant(s)**

PRIESNITZ ET AL.

**Examiner**

Rena L. Dye

**Art Unit**

3627

ML

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Withdrawn Rejections***

***Claim Rejections - 35 USC § 112***

1. The rejection of claims 1-20 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement as set forth in paragraph no. 3 of paper no. 18, has been withdrawn in view of Applicant's pointing to where support can be found for the presently claim limitations.
2. The rejection of claims 5-9 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, as set forth in paragraph no. 4 of paper no. 18, has been withdrawn in view of Applicant's deletion of "about" language in the present claims.
3. The rejection of claims 5-9 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention, as set forth in paragraph no. 5 of paper no. 18, has been withdrawn in view of Applicant's deletion of "about" language in the present claims.
4. The rejection of claims 1-12 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention as set forth in paragraph no. 6 of paper no. 18 has been withdrawn in view of Applicant's amendments to the present claims.

Art Unit: 3627

5. The rejection of claims 13-20 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as set forth in paragraph no. 7 of paper no. 18, has been withdrawn in view of Applicant's amendment to the present claims.

6. The rejection of claims 1-20 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as set forth in paragraph no. 8 of paper no. 18, has been withdrawn in view of Applicant's amendments to the present claims.

***New Rejections***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 5, the phrase "bounding a core of said communication cable" is confusing. In the preamble of claim 1 Applicant recites "A sheathing for a communication cable". Since line 5 refers to "said communication cable", is Applicant now claiming a sheathing with the intended use for a communication cable, or is Applicant now positively claiming the communication cable ("said communication cable")? Clarification is requested.

Art Unit: 3627

In claim 1, lines 6-7, the phrase “a second layer adjacent said first layer and *bounding an exterior of said communication cable*” is vague and confusing. Is Applicant referring to the second layer being adjacent and exterior to that of the first layer, or is Applicant referring to the second layer bounding the exterior of the communication cable? Could the second layer be located internal to the first layer so that the second layer bounds an exterior of the communication cable? Clarification is requested.

Taking into consideration only the recited layers, Applicant is claiming a first layer is bounding a core of said communication cable...; a second layer adjacent said first layer and bounding an exterior of said communication cable, which is confusing. It is not clear as to why Applicant is using the terms “core” and “exterior” to define the positioning of the layers. Is Applicant using the terms core and exterior interchangeably?

More simply, is Applicant's invention directed to a two layer sheathing having a first layer and a second layer external to the first layer? With or without a communication cable? Does the communication cable have to be present or not? Clarification is requested.

9. Claims 13-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13, “a plurality of predetermined characteristics of said exterior layer being selected from the group consisting of” is vague and confusing. “Selected from the group consisting of a thickness of the exterior layer and the proportion of said dye selected such that said exterior layer absorbs the radiation used for marking completely” is improper Markush

Art Unit: 3627

language because it only recites one item, which does not constitute a grouping. The recitation of is merely a subsequent step that occurs after the exterior layer absorbs the radiation. A Markush grouping should contain more than one member, or such language "selected from the group consisting of" should be deleted. Using the language " plurality of predetermined characteristics" creates additional confusion in the claims with only one member of the Markush group.

10. Note: Claims 15-17 should have been rejected under 35 USC 112, 1<sup>st</sup> and 2<sup>nd</sup> para. since they contain same/similar claimed subject matter as previously rejected claims claim 5,7,8 with regard to "about" language. Since applicant has amended claims 5-9 to eliminate the "about" language, the "about" language recited in claims 15-17 is deemed to be admitted new matter and should be deleted prior to the issuance of this patent application.

### ***Maintained Rejections***

#### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,3,10,11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler (US 4,865,198).

Butler teaches a sheathing article or overwrapping packaging material comprising an external layer of flexible transparent or translucent overwrap plastic film. In all embodiments of the invention the overwrap film must have sufficient transparency or translucency so that a

Art Unit: 3627

pattern disposed on its inner surface is visible through the film. Preferred films include single or multiple layer films comprising polyolefins (thermoplastic material). The chemical nature of the film is not critical as long as it (1) has sufficient film integrity for its intended protective use, (2) provides a surface having appropriate ink affinity characteristics, and (3) is essentially transparent, or sufficiently conductive with respect to the energy source used to vaporize or activate the underlying coating or pigments. With appropriate selection of energy type and level, wavelength and the link, the process is amenable to any of the optically transparent overwrap films used commercially (column 2, lines 12-39). The overwrapped package includes a package of substrate 3 which can be constructed from any suitable packaging material such as paper, metal, glass, plastic or the like with a heat-labile ink, pigment or adhesive coating 4. The heat-labile ink can be any ink that can be vaporized by an energy source such as light provided from a pulsed laser. The ink can be thermotropic in nature so that direct heat application causes a change in color (column 2, lines 40-55).

Butler fails to specifically teach a dye provided in both the first and second layers. It would have been obvious to one having ordinary skill in the art to have provided dye in both layers, or either layer by itself to have provided the overwrapping package material with a preferred design choice. The first and second layers being formed of the same material are within the scope of the teachings of the reference.

\*The limitation of claim 1, "a color change results within an irradiated region upon irradiation by melting the irradiated region, thereby forming a foamed CO<sub>2</sub> region that scatters incident light, only recites a subsequent process in which the sheathing undergoes

Art Unit: 3627

after bounding a communication cable. In other words the final product is not foamed as recited but is intended to be subsequently foamed. The claims only recite that the materials are selected to cause a color change upon irradiation with photons..." Therefore, that which is taught by the applied prior art only has to be capable of meeting the claimed limitation.

Since Butler (and Bonkowski) teaches the use of a laser for vaporizing inks in sheathings or substrates, it is the Examiner's position that that which is made obvious by Butler or Butler in view of Bonkowski would be capable of forming a foamed CO<sub>2</sub> surface.

12. Claims 4-9 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler (US 4,865,198) in view of Bonkowski et al. (US 6,031,457).

Butler has been previously discussed and fails to specifically teach graphite as the dye material.

Bonkowski teaches a substrate layer or film which can be printed using a laser or other types of printers. The printing can be composed of any printing materials such as paint, ink or graphite compositions (column 5, lines 19-57).

Since Bonkowski teaches that graphite is a known dye or ink for use in printing with a laser, it would have been obvious to one having ordinary skill in the art to have used graphite in the ink or pigment layer of Butler. The proportion of dye in each of the layers would have been an obvious design choice based upon the desired visual appearance.

With respect to thickness, one having ordinary skill in the art would have known how to have varied the thickness based upon the desired degree of strength and barrier property.



***Response to Arguments***

13. Applicant's arguments filed on February 24, 2004 have been fully considered but they are not persuasive.

Applicant's claims are again rejected under 35 USC 112 in view of Applicant's amendments to the present claims. It is the Examiner's position that the art rejections of record should be maintained according to the Examiner's arguments in the previous paragraph.

Although Butler fails to specifically teach a dye provided in both the first and second layers. It would have been obvious to one having ordinary skill in the art to have provided dye in both layers or either layer by itself to have provided the overwrapping package material with a preferred design choice. The first and second layers being formed of the same material are within the scope of the teachings of the reference. Using a laser to vaporize the dye is taught within the applied prior art. Variations in the placement of the dye prior to vaporization would be a mere design choice, and could be varied to make a particular marking more visible or as a means of coding a cable sheath.

***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

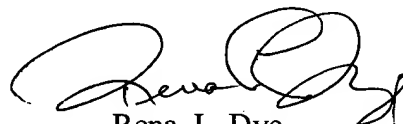
Art Unit: 3627

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rena L. Dye whose telephone number is 703-308-4331. The examiner can normally be reached on Monday-Tuesday 8:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on 703-308-5183. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rena L. Dye  
Primary Examiner  
Art Unit 3627

R. Dye  
May 3, 2004